SCHEDULE 3.8

AMERITECH INTERCONNECTION PERFORMANCE BENCHMARKS

- 1.0 Trunk Provisioning Intervals
 - 1.1 Number of End Office

rumber of Ema Office	
Trunks Per Order Per Day	<u>Interval</u>
1-48	14 days
49-96	15 days
97 +	Negotiated

1.2 New Trunk Groups to Tandem(s)

Negotiated

2.0 Trunking Grade of Service

Blocking Standards

<u>Traffic Type</u>	<u>Measurement</u>
Exchange Access Final Trunk Group Traffic	
via Tandems	1/2 of 1% (0.005)
All Other Final Trunk Group Traffic	1% (0.01)

3.0 Trunk Restoral

Type of Outage	<u>Interval</u>
Service Affecting	within 1 hour
Non-Service Affecting	within 24 hours

The Parties agree that additional Interconnection Performance Benchmarks may be agreed upon by the Implementation Team. However, if any additional Interconnection Performance Benchmarks require a Party to maintain records which it then does not maintain, the Party requesting such new or additional benchmarks shall utilize the Bona Fide Request process with respect to such records.

SCHEDULE 3.9

9-1-1 SERVICE

1.0 Standard Features

- 1.1. <u>Forced Disconnect</u>. Enables the PSAP attendant to release a connection on a 9-1-1 call, even if the calling party remains off-hook. The time required to effect the forced disconnect varies as a function of the office type.
- 1.2. <u>Default Routing</u>. Default Routing is activated when an incoming 9-1-1 call cannot be selectively routed due to an ANI failure, garbled digits or other causes. Such incoming calls are routed from the 9-1-1 Control Office to a default PSAP if requested by the primary PSAP. Each incoming 9-1-1 facility group to the Control Office is assigned to a designated default PSAP. Default ANI and ALI data is provided when a call is Default Routed to indicate such routing has taken place.
- 1.3. <u>Alternate Routing</u>. Alternate Routing allows 9-1-1 calls to be routed to a designated alternate location if (a) all 9-1-1 Service Lines to the Primary PSAP are busy, or (b) the Primary PSAP closes down for a period (e.g., night service).

1.4. <u>Central Office Transfer Arrangements</u>: •

- 1.4.1. Manual transfer enables the PSAP attendant to transfer an incoming call by depressing the switchhook of the associated telephone or the "add" button on the Display and Transfer Unit and dialing either a 10-digit telephone number, a 7-digit telephone number or a 2-digit speed calling code.
- 1.4.2. Fixed transfer enables a PSAP attendant to transfer incoming 9-1-1 calls to Secondary PSAPs by use of a single button on the Display and Transfer Unit.
- 1.4.3. Selective transfer provides the PSAP with the ability to transfer an incoming call to another responding agency by depressing a single button labeled with the type of agency (e.g., "FIRE") on the Display and Transfer Unit. Selective transfer is only available when Selective Routing is provided.

2.0 9-1-1 Meet Points For Primary And Diverse Routes

The point of Interconnection for Requesting Carrier's Primary and Diverse Routes to the mux/co-location and 9-1-1 Control Offices is at the Ameritech Central Office. Requesting Carrier shall pay tariff charges for Diverse routes. Requesting Carrier will be responsible for determining the proper quantity of trunks from its End Office(s) to the Ameritech Central Office(s). Trunks between the Ameritech Central

Office and the Ameritech Control Office shall be delivered by Ameritech within twenty (20) Business Days following order by Requesting Carrier. Following delivery, Requesting Carrier and Ameritech will cooperate to promptly test all transport facilities between Requesting Carrier's network and the Ameritech Control Office to assure proper functioning of the 9-1-1 service.

SCHEDULE 6.0

MEET-POINT BILLING RATE STRUCTURE

A. Interstate access - Terminating to or originating from Requesting Carrier Customers served from a Requesting Carrier local exchange End Office.

Rate Element	Billing	
	•	Company
CCL Local Switching Interconnection Charge		Requesting Carrier Requesting Carrier Requesting Carrier
Local Transport (Tandem)	Termination	50% Ameritech
		50% Requesting Carrier
Local Transport (Tandem)	Facility	This will be calculated based on NECA tariff No. 4 filings for each Party
Tandem Switching		Ameritech
Entrance Facility		Ameritech

B. Intrastate access - Terminating to or originating from Requesting Carrier Customers served from a Requesting Carrier local exchange End Office.

Rate Element	Billing	Company
		Company
CCL		Requesting Carrier
Local Switching		Requesting Carrier
Interconnection Charge		Requesting Carrier
Local Transport (Tandem) Term	ination	50% Ameritech
		50% Requesting Carrier
		poyo rod morning o mirror
Local Transport (Tandem) Facili	ty	This will be calculated based on NECA tariff
		No. 4 filings for each Party
Tourism Conitabina		A suite all
Tandem Switching		Ameritech
Entrance Facility		Ameritech
<u> </u>		• • • • • • • • • • • • • • • • • • • •

SCHEDULE 9.2.1

LOCAL LOOPS

Subject to <u>Section 1.1</u> of <u>Schedule 9.5</u>, Ameritech shall allow Requesting Carrier to access the following Loop types (in addition to those Loops available under applicable tariffs) unbundled from local switching and local transport.

- "2-Wire Analog Voice Grade Loop" or "Analog 2W," which supports analog transmission of 300-3000 Hz, repeat loop start, loop reverse battery, or ground start seizure and disconnect in one direction (toward the End Office Switch), and repeat ringing in the other direction (toward the Customer) and terminates in a 2-Wire interface at both the central office MDF and the customer premises. Analog 2W includes Loops sufficient for the provision of PBX trunks, pay telephone lines and electronic key system lines. Analog 2W will be provided in accordance with the specifications, interfaces, and parameters described in Technical Reference AM-TR-TMO-000122, Ameritech Unbundled Analog Loops.
- "4-Wire Analog Voice Grade Loop" or "Analog 4W," which supports transmission of voice grade signals using separate transmit and receive paths and terminates in a 4-wire electrical interface at both ends. Analog 4W will be provided in accordance with the specifications, interfaces, and parameters described in Technical Reference AM-TR-TMO-000122, Ameritech Unbundled Analog Loops.
- "2-Wire ISDN 160 Kbps Digital Loop" or "BRI-ISDN" which supports digital transmission of two 64 kbps bearer channels and one 16 kbps data channel (2B+D). BRI-ISDN is a 2B+D Basic Rate Interface-Integrated Services Digital Network (BRI-ISDN) Loop which will meet national ISDN standards and conform to Technical Reference AM-TR-TMO-000123, Ameritech Unbundled Digital Loops (including ISDN).
- "2-Wire ADSL-Compatible Loop" or "ADSL 2W" is a transmission path which facilitates the transmission of up to a 6 Mbps digital signal downstream (toward the Customer) and up to a 640 kpbs digital signal upstream (away from the Customer) while simultaneously carrying an analog voice signal. An ADSL-2W is provided over a 2-Wire, non-loaded twisted copper pair provisioned using revised resistance design guidelines and meeting ANSI Standard T1.413-1995 and AM TR--TMO-000123. An ADSL-2W terminates in a 2-wire electrical interface at the Customer premises and at the Ameritech Central Office frame. ADSL technology can only be deployed over Loops which extend less than 18 Kft. from Ameritech's Central Office. ADSL compatible Loops are available only where existing copper facilities can meet the ANSI T1.413-1995 specifications.

- "2-Wire HDSL-Compatible Loop" or "HDSL 2W" is a transmission path which facilitates the transmission of a 768 kbps digital signal over a 2-Wire, non-loaded twisted copper pair meeting the specifications in ANSI T1E1 Committee Technical Report Number 28. HDSL compatible Loops are available only where existing copper facilities can meet the T1E1 Technical Report Number 28 and AM-TR-TMO-000123 specifications.
- "4-Wire HDSL-Compatible Loop" or "HDSL 4W" is a transmission path which facilitates the transmission of a 1.544 Mbps digital signal over two 2-Wire, non-loaded twisted copper pairs meeting the specifications in ANSI T1E1 Committee Technical Report Number 28 and AM TR-TMO-000123. HDSL compatible Loops are available only where existing copper facilities can meet the T1E1 Technical Report Number 28 specifications.
- "4-Wire 64 Kbps Digital Loop" or "4-Wire 64 Digital" is a transmission path which supports transmission of digital signals of up to a maximum binary information rate of 64 Kbps and terminates in a 4-Wire electrical interface at both the Customer premises and on the MDF in Ameritech's Central Office. 4-Wire 64 Digital will be provided in accordance with the specifications, interfaces and parameters described in AM-TR-TMO-000123.
- "4-Wire 1.544 Mbps Digital Loop" or "1.544 Mbps Digital" is a transmission path which supports transmission of digital signals of up to a maximum binary information rate of 1.544 Mbps and terminates in a 4-Wire electrical interface at the Customer premises and on the DSX frame in Ameritech's Central Office. 1.544 Mbps Digital will be provided in accordance with the specifications, interfaces and parameters described in AM-TR-TMO-00023.

SCHEDULE 9.2.2

UNBUNDLED ACCESS TO NETWORK INTERFACE DEVICES

Ameritech's Network Interface Device ("NID") is a Network Element that utilizes a cross-connect device to connect loop facilities to inside wiring.

Ameritech will permit Requesting Carrier to connect Requesting Carrier's loop to the inside wiring of the Customer's premises through Ameritech's NID, where necessary. Requesting Carrier must establish the connection to Ameritech's NID through an adjoining NID which serves as the network interface or demarcation for Requesting Carrier's loop.

Maintenance and control of premises (inside wiring) is under the control of the Customer. Any conflicts between service providers for access to the Customer's inside wire must be resolved by the Customer.

SCHEDULE 9.2.3

SWITCHING CAPABILITY

- 1.0 Local Switching. The local switching capability of a Network Element is defined as:
 - (1) line-side facilities, which include the connection between a Loop termination at the Main Distribution Frame and a switch line card;
 - (2) trunk-side facilities, which include the connection between trunk termination at a trunk-side cross- connect panel and a switch trunk card; and
 - (3) all features, functions, and capabilities of the switch available from the specific port type (line side or trunk side port), which include:
 - (a) the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks, as well as the same basic capabilities made available to Ameritech's Customers, such as a telephone number, white page listing, and dial tone;
 - (b) access to operator services, directory assistance and 9-1-1; and
 - (c) all other features that the switch provides, including custom calling, CLASS features and Centrex, as well as any technically feasible customized routing functions available from such switch.

When local switching is provided by Ameritech, Requesting Carrier will receive Customer Usage Data and billing information in accordance with the requirements of Section 10.16.

2.0 Tandem Switching.

- 2.1 The Tandem Switching Capability Network Element is defined as:
- an unbundled Network Element in Ameritech's Class 4 non-TOPS digital Tandem Switches, which includes Interconnection with the trunk at the Tandem Distribution Frame ("TDF") and the Tandem Switch trunk ports;
- (2) the basic switching function of creating a temporary transmission path that connects Requesting Carrier's trunks to the trunks of Ameritech, IXCs, ICOs, CMRS, and other LECs interconnected to the Tandem Switch.

- 2.2 Interconnecting trunk types which can be switched include FGB, FGC, FGD and Type II. Signaling support includes Rotary, MF, and SS7 and any signaling conversions between these signaling formats.
- 2.3 Variations in Tandem Switching equipment used to provide service in specific locations may cause differences in the operation of certain features.
- 2.4 The unbundled Tandem Switching Network Element will provide to Requesting Carrier all available basic Tandem Switching functions and basic capabilities that are centralized in the Tandem Switch (and not in End Office Switches), including the following functions Ameritech makes available to its Customers:
- 1. Routing of calls from an inbound trunk to an outbound trunk based on destination digits.
 - 2. Routing of Equal Access or Operator Service calls from an inbound trunk to an outbound trunk based on the CIC forwarded by the inbound trunk.
- 2.5 Translations, screening, blocking, and route indexing are provided if technically feasible under the standard switching translations and screening in use in that switch. A request for translations, screening, blocking, route indexing other than what is available (i.e., features that the switch is capable of providing) in that switch will be provided where technically feasible as a Bona Fide Request. Ameritech will provide these features if technically feasible and upon agreement by Requesting Carrier to pay the applicable recurring and nonrecurring costs of developing, installing, providing and maintaining the capability. Variations in the Tandem Switching equipment or translation and screening used to provide service in specific locations may cause differences in the operation of the element.

SCHEDULE 9.2.4

INTEROFFICE TRANSMISSION FACILITIES

Interoffice Transmission Facilities are Ameritech transmission facilities dedicated to a particular Customer or carrier, or shared by more than one Customer or carrier, used to provide Telecommunications Services between Wire Centers owned by Ameritech or Requesting Carrier, or between Switches owned by Ameritech or Requesting Carrier.

- 1. Ameritech provides several varieties of unbundled transport facilities:
- 1.1. Unbundled dedicated interoffice transport facility ("Dedicated Transport") is a dedicated facility connecting two Ameritech Central Offices buildings via Ameritech transmission equipment. In each Central Office building, Requesting Carrier will Cross-Connect this facility to its own transmission equipment (physically or virtually) Collocated in each Wire Center, or to other unbundled Network Elements provided by Ameritech to the extent the requested combination is technically feasible and is consistent with other standards established by the FCC for the combination of unbundled Network Elements. All applicable digital Cross-Connect, multiplexing, and Collocation space charges apply at an additional cost.
- 1.2. "Unbundled dedicated entrance facility" is a dedicated facility connecting Ameritech's transmission equipment in an Ameritech Central Office with Requesting Carrier's transmission equipment in Requesting Carrier's Wire Center for the purposes of providing Telecommunications Services.
- 1.3. Shared transport transmission facilities ("Shared Transport") are a billing arrangement where two (2) or more carriers share the features, functions and capabilities of transmission facilities between the same types of locations as described for dedicated transport in <u>Sections 1.1</u> and <u>1.2</u> preceding and share the costs.
- 2. Ameritech shall offer Interoffice Transmission Facilities in each of the following ways:
- 2.1. As a dedicated transmission path (e.g., DS1, DS3, OC3, OC12 and OC48) dedicated to Requesting Carrier.
 - 2.2. As a shared transmission path as described in Section 1.3 above.
- 3. Where Dedicated Transport or Shared Transport is provided, it shall include (as appropriate):
 - 3.1. The transmission path at the requested speed or bit rate.

- 3.2. The following optional features are available; if requested by Requesting Carrier, at additional cost:
 - 3.2.1. Clear Channel Capability per 1.544 Mbps (DS1) bit stream.
 - 3.2.2. Ameritech provided Central Office multiplexing:
 - (a) DS3 to DS1 multiplexing; and
 - (b) DS1 to Voice/Base Rate/128, 256, 384 Kpbs Transport multiplexing.
 - 3.3. If requested by Requesting Carrier, the following are available at an additional cost:
 - 3.3.1. 1+1 Protection for OC3, OC12 and OC48.
 - 3.3.2. 1+1 Protection with Cable Survivability for OC3, OC12 and OC48.
 - 3.3.3. 1+1 Protection with Route Survivability for OC3, OC12 and OC48.
- 4. Technical Requirements.

This Section sets forth technical requirements for all Interoffice Transmission Facilities:

- 4.1. When Ameritech provides Dedicated Transport as a circuit, the entire designated transmission facility (e.g., DS1, DS3, and where available, STS-1) shall be dedicated to Requesting Carrier designated traffic.
- 4.2. Ameritech shall offer Dedicated Transport in all then currently available technologies including DS1 and DS3 transport systems, SONET Bi-directional Line Switched Rings, SONET Unidirectional Path Switched Rings, and SONET point-to-point transport systems (including linear add-drop systems), at all available transmission bit rates, except subrate services, where available.
- 4.3. For DS1 facilities, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Customer Interface to Central Office "CI to CO" connections in the applicable technical references set forth under Dedicated and Shared Transport in the Technical Reference Schedule.
- 4.4. For DS3 and, where available, STS-1 facilities and higher rate facilities, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Customer Interface to Central Office "CI to CO" connections in the applicable technical references set forth under Dedicated and Shared Transport in the Technical Reference Schedule.

- 4.5. When requested by Requesting Carrier, Dedicated Transport shall provide physical diversity. Physical diversity means that two circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits.
- 4.6. When physical diversity is requested by Requesting Carrier, Ameritech shall provide the maximum feasible physical separation between intra-office and inter-office transmission paths (unless otherwise agreed by Requesting Carrier).
 - 4.7. Any request by Requesting Carrier for diversity shall be subject to additional charges.
- 4.8. Upon Requesting Carrier's request and its payment of any additional charges, Ameritech shall provide immediate and continuous remote access to performance monitoring and alarm data affecting, or potentially affecting, Requesting Carrier's traffic.
 - 4.9. Ameritech shall offer the following interface transmission rates for Dedicated Transport:
 - 4.9.1. DS1 (Extended SuperFrame ESF, D4, and unframed applications (if used by Ameritech));
 - 4.9.2. DS3 (C-bit Parity and M13 and unframed applications (if used by Ameritech) shall be provided);
 - 4.9.3. SONET standard interface rates in accordance with the applicable ANSI technical references set forth under Dedicated and Shared Transport in the Technical Reference Schedule. In particular, where STS-1 is available, VT1.5 based STS-1s will be the interface at a Requesting Carrier service node.
- 4.10. Upon Requesting Carrier's request, Ameritech shall provide Requesting Carrier with electronic provisioning control of a Requesting Carrier specified Dedicated Transport through Ameritech Network Reconfiguration Service (ANRS) on the rates, terms and conditions in F.C.C. Tariff No. 2.
- 4.11. Ameritech shall permit, at applicable rates, Requesting Carrier to obtain the functionality provided by DCS together with and separate from dedicated transport in the same manner that Ameritech offers such capabilities to IXCs that purchase transport services. If Requesting Carrier requests additional functionality, such request shall be made through the Bona Fide Request process.

SCHEDULE 9.2.5

SIGNALING NETWORKS AND CALL-RELATED DATABASES

1.0 Signaling Transfer Points.

A Signaling Transfer Point (STP) is a signaling network function that includes all of the capabilities provided by the signaling transfer point switches (STPSs) and their associated signaling links which enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer point switches.

1.1. Technical Requirements.

- 1.1.1. STPs shall provide access to all other Network Elements connected to Ameritech SS7 network. These include:
 - 1.1.1.1. Ameritech Local Switching or Tandem Switching;
 - 1.1.1.2. Ameritech Service Control Points/Databases;
 - 1.1.1.3. Third-party local or tandem switching systems; and
 - 1.1.1.4. Third-party-provided STPSs.
- 1.1.2. The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to the Ameritech SS7 network. This explicitly includes the use of the Ameritech SS7 network to convey messages which neither originate nor terminate at a Signaling End Point directly connected to the Ameritech SS7 network (i.e., transient messages). When the Ameritech SS7 network is used to convey transient messages, there shall be no alteration of the Integrated Services Digital Network User Part (ISDNUP) or Transaction Capabilities Application Part (TCAP) user data that constitutes the content of the message.
- 1.1.3. If an Ameritech Tandem Switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between a Requesting Carrier local switch and third party local switch, the Ameritech SS7 network shall convey the TCAP messages that are necessary to provide Call Management features (Automatic Callback, Automatic Recall, and Screening List Editing) between the Requesting Carrier local STPSs and the STPSs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to the Ameritech STPSs, based on the routing instruction provided in each message.

- 1.1.4. STPs shall provide all functions of the MTP as specified in ANSI T1.111. This includes:
 - 1.1.4.1. Signaling Data Link functions, as specified in ANSI T1.111.2:
 - 1.1.4.2. Signaling Link functions, as specified in ANSI T1.111.3; and
 - 1.1.4.3. Signaling Network Management functions, as specified in ANSI T1.111.4.
- 1.1.5. STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112. In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4. In cases where the destination signaling point is an Ameritech local or tandem switching system or database, or is a Requesting Carrier or third party local or tandem switching system directly connected to the Ameritech SS7 network, STPs shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a gateway pair of STPSs in an SS7 network connected with the Ameritech SS7 network, and shall not perform SCCP Subsystem Management of the destination.
- 1.1.6. STPs shall also provide the capability to route SCCP messages based on ISNI, as specified in ANSI T1.118, when this capability becomes available on Ameritech STPSs.
 - 1.1.7. STPs shall provide all functions of the OMAP commonly provided by STPSs. This includes:
 - 1.1.7.1. MTP Routing Verification Test (MRVT); and
 - 1.1.7.2. SCCP Routing Verification Test (SRVT).
- 1.1.8. In cases where the destination signaling point is an Ameritech local or tandem switching system or database, or is a Requesting Carrier or third party local or tandem switching system directly connected to the Ameritech SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPSs in an SS7 network connected with the Ameritech SS7 network. This requirement shall be superseded by the specifications for Internetwork MRVT and SRVT if and when these become approved ANSI standards and available capabilities of Ameritech STPSs.
 - 1.1.9. STPs shall be equal to or better than the following performance requirements:
 - 1.1.9.1. MTP Performance, as specified in ANSI T1.111.6; and
 - 1.1.9.2. SCCP Performance, as specified in ANSI T1.112.5.

1.2. Signaling Link Transport.

1.2.1. Definition. Signaling Link Transport is a set of two (2) or four (4) dedicated 56 Kbps transmission paths between Requesting Carrier-designated Signaling Points of Interconnection (SPOI) that provides appropriate physical diversity.

Technical Requirements.

- 1.2.2. Signaling Link Transport shall consist of full duplex mode 56 Kbps transmission paths.
- 1.2.3. Of the various options available, Signaling Link Transport shall perform in the following two (2) ways:
 - a) As an "A-link" which is a connection between a switch or SCP and a Signaling Transfer Point Switch (STPS) pair; and
 - b) As a "D-link" which is a connection between two (2) STP mated pairs in different company networks (e.g., between two (2) STPS pairs for two Competitive Local Exchange Carriers (CLECs)).
 - 1.2.4. Signaling Link Transport shall consist of two (2) or more signaling link layers as follows:
 - a) An A-link layer shall consist of two (2) links.
 - b) A D-link layer shall consist of four (4) links.
 - 1.2.5. A signaling link layer shall satisfy a performance objective such that:
 - a) There shall be no more than two (2) minutes down time per year for an A-link layer; and
 - b) There shall be negligible (less than two (2) seconds) down time per year for a D-link layer.
- 1.2.6. A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:
 - a) No single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two (2) separate physical paths end-to-end); and

- b) No two (2) concurrent failures of facilities or equipment shall cause the failure of all four (4) links in a D-link layer (i.e., the links should be provided on a minimum of three (3) separate physical paths end-to-end).
- 1.2.7. Interface Requirements. There shall be a DS1 (1.544 Mbps) interface at the Requesting Carrier-designated SPOI. Each 56 Kbps transmission path shall appear as a DS0 channel within the DS1 interface.

2.1. Toll Free Database Services.

2.1.1. <u>Call Routing Service</u>. The Call Routing Service provides for the identification of the carrier to whom a call is to be routed when a toll-free (1+800-NXX-XXXX) or 1+888-NXX-XXXX) call is originated by Customer. This function uses the dialed digits to identify the appropriate carrier and is done by screening the full ten digits of the dialed number. The Call Routing Service may be provided in conjunction with a Customer's InterLATA or IntraLATA Switched Exchange Access Service.

When 800 Call-Routing service is provided, an originating call is suspended at the first switching office equipped with a Service Switching Point (SSP) component of the SSC/SS7 Network. The SSP launches a query over signaling links (A-links) to the Signal Transfer Point (STP), and from there to the SCP. The SCP returns a message containing the identification of the carrier to whom the call should be routed and the call is processed.

Requesting Carrier's SS7 network is used to transport the query from its End Office to the Ameritech SCP. Once Requesting Carrier's identification is provided, Requesting Carrier may use the information to route the toll-free traffic over its network. In these cases, Ameritech Switched Access services are not used to deliver a call to Requesting Carrier. The toll-free carrier ID date may not be stored for Requesting Carrier's future use.

- 2.1.2. <u>Routing Options</u>. In addition to the toll-free service offerings, new routing options are offered. These options are purchased by toll-free service providers to allow their clients to define complex routing requirements on their toll-free service. Toll-free routing options allow the service provider's Customer to route its toll-free calls to alternate carriers and/or destinations based on time of day, day of week, specific dates or other criteria. These routing options are in addition to the basic toll-free call routing requirements which would include the toll-free number, the intraLATA carrier, the interLATA carrier and the Area of Service (AOS).
- 2.1.3. <u>Carrier Identification</u>. Requesting Carrier may choose the 800 Carrier Identification service to obtain toll-free number screening. With this service, Requesting Carrier will launch a query to the Ameritech database using its own Service Switching Points (SSPs) network. In contrast to the Call Routing Service described in <u>Section 2.1.1</u> above, with the 800 Carrier Identification service, no routing is performed.

2.1.4. <u>Number Administration</u>. Requesting Carrier, at its option, may elect to use Ameritech's toll-free Service which includes toll-free Number Administration Service (NAS). With this service, Ameritech will perform the Responsible Organization service, which involves interacting with the national Service Management System (SMS/800), on behalf of the Customer. Responsible Organization services include activating, deactivating and maintaining 800/888 number records as well as trouble referral and clearance. If Requesting Carrier does not select NAS, Requesting Carrier will perform the Responsible Organization service.

2.2. LIDB Database Service.

- 2.2.1. The Line Information Database (LIDB) Query Response Service is a validation database system. It enables Requesting Carrier to offer alternately billed services to its Customers. The database provides an efficient way to validate calling cards and toll billing exception (TBE) (i.e., restricts a collect or third-party billed call). Toll fraud protection and reduced call set up expenses are among the benefits of the service.
- 2.2.2. Billing information records include the Customer name, phone number security personal identification numbers and third-party acceptance indications. Prior to call completion, a query is launched to the LIDB to determine the validity of the requested billing method. The call is then completed or denied based on the LIDB's response.

2.3. CNDS Database Service.

- 2.3.1 Caller ID identifies a calling party's telephone number through a switch-based feature installed in Ameritech's Central Office. CNDS is a CCIS/SS7 network based feature that accesses a CNDS database within the LIDB to provide a name associated with the calling party's telephone number. This service is provided using TR1188 protocol.
- 2.3.2 A Customer who subscribes to Caller ID with Name will see the listed name associated with the calling party's telephone line displayed on his/her Caller ID display unit. The telephone number associated with the telephone line of the calling party will also be displayed.
- 2.3.3 Ameritech shall charge Requesting Carrier for the CNDS Database Service in a similar manner to that which Ameritech charges Requesting Carrier for the LIDB Database Service, including a per query charge.

2.4 Local Number Portability.

2.4.1 Ameritech's provision of LNP will utilize LRN switch software based on requirements developed by the workshop participants and concurred in by the Commission. These requirements are fully compliant with the principles adopted by the FCC in its First Report and

Order, CC Docket No. 95-116 (the "Number Portability Order"). The detailed description and technical specifications for the planned LRN implementation can be found in various documents produced by the FCC Local Number Portability workshop.

2.4.2 Ameritech is fully prepared to provide LNP database access to Requesting Carrier. However, in adopting its Number Portability Order, the FCC referred certain technical and other issues to the North American Numbering Council (NANC) and issued a further notice addressing the recovery of costs associated with LNP implementation. Until these activities are concluded, Ameritech cannot finalize product descriptions and rates for access to its LNP database. Nonetheless, Ameritech is willing to begin discussions with Requesting Carrier to discuss Requesting Carrier's access to Ameritech's LNP databases in lieu of constructing Requesting Carrier's own.

2.5. Unbundled AIN Application Process.

- 2.5.1. The AIN architecture establishes a network infrastructure in which subscriber services can be defined and implemented independent from End-Office Switches. This is accomplished by a combination of SS7 signaling, interfaces between Network Elements and call-state models through which AIN Network Elements interact.
- 2.5.2. Ameritech's Unbundled AIN (Advanced Intelligent Network) Applications Access service will be provided on a nondiscriminatory basis and enable Requesting Carrier (whether it purchases unbundled switching capabilities from Ameritech or owns its own SSP (Service Switching Point)) to offer its Customers AIN services. Ameritech will make available existing AIN retail applications, as well as newly created services that Requesting Carrier creates via the Ameritech AIN Service Creation Environment (SCE) Access service. Unbundled AIN Applications Access provides for the AIN functionality necessary for the day to day ongoing call processing associated with a specific AIN applications execution. This includes the SS7 transport and SCP processing of the query associated with the specific service.
- 2.5.3. Associated with the AIN SCP is a Service Creation Environment (SCE) and a Service Management System (SMS). Ameritech offers access to the Ameritech SMS and SCE capabilities via two (2) AIN offerings: AIN Service Creation Environment Access Service and AIN Service Management System Access Service.
- 2.5.4. Carriers will share the common AIN infrastructure components provided by Ameritech, such as a Service Control Point (SCP), a Signaling Transfer Point (STP), Service Management System (SMS), and, if Requesting Carrier purchases Unbundled Switching from Ameritech, the AIN Service Switching Point (SSP). Requesting Carrier shall be responsible for assuring the compatibility of its AIN SSP software generics with the Ameritech AIN Applications and SCP software releases. Interconnection of the Requesting Carrier SSP with the Ameritech SS7 network is required, and can be accomplished in a number of ways.

- 2.5.5. Activation of the desired application at the Ameritech SCP requires subscription by both the ordering carrier Requesting Carrier and the end-user. In general, AIN operations require close cooperation between Ameritech and the requesting Carrier.
- 2.5.6. The SSP and SCP vendors provide logical capabilities which Ameritech uses to create each AIN service. The SSP and SCP vendors have no knowledge of the specific AIN Applications that Ameritech has created. Ameritech's AIN deployment is based on AIN 0.1.

3.1. AIN Service Creation Environment Access Service.

Access to Ameritech's AIN service creation functionality will be provided in a nondiscriminatory manner to Requesting Carrier to enable it to create new AIN services on Ameritech's network. If Requesting Carrier has a new AIN service concept, it can utilize all or some of the features below to obtain a fully functional AIN service. Ameritech will furnish Requesting Carrier with a list of AIN Applications and the switches on which such applications are available, including the software version of AIN on such switch type. The following is a list of AIN service creation functions available via this service offering:

- 3.1.1. Service Concept Description: The description of service idea should detail requirements such as: dialing patterns, information exchange, announcements, voice prompts, expected service management screens and reports, and CPE requirements. The AIN service creation functions made available to Requesting Carrier must be the same ones Ameritech uses, subject to any third party restrictions Ameritech may be subject to.
- 3.1.2. Creation of Technical Specification: Translation of a new service description into a technical specification including engineering requirements for Ameritech's network. The technical specification must detail how the service interacts in the network, translated in network terms, should include any expected/anticipated feature interaction discrepancies, and will include the process flows on how the service traverses the network.
- 3.1.3. Service Logic Design: The development of service design from SCP perspective to include Algorithms, Data Structures and Flow Diagrams.
- 3.1.4. Service Logic Coding: Development of machine logic in the SCE to include tables, SIBBs, and other elements as necessary.
- 3.1.5. Service Logic Testing: Service logic testing isolated within the to SCE to ensure accuracy of compilation and code development and compliance with Ameritech's AIN environment.
- 3.1.6. SMS Interface Requirements: Development of Requesting Carrier SMS interface access including screens, flow-through interface and reports. This is required to allow Requesting Carrier to activate, update, modify, and administer Customer data associated with the new service.

- 3.1.7. Platform Access Logic Configuration: Service specific updates to global infrastructure required to enable new service. Includes modification of the access logic to enable a new service.
- 3.1.8. Service Integration Testing (SIL): Intensive laboratory testing of service in conjunction with all Ameritech Switch types and or provider switch types and generics (as necessary) to minimize potential feature interaction conflicts and negative network reactions. Resources must be made available to Requesting Carrier on a nondiscriminatory basis.
- 3.1.9. Network Implementation: Conditioning of the SMS, SCP, SSP, or STP to accept service including network translations, signaling connectivity, dialing plans, and coordination of provisioning process.
- 3.1.10. Field Testing: Comprehensive controlled testing in a live switch environment, possibly at Requesting Carrier's SSP location.

3.2. AIN Service Management System Access Service.

- 3.2.1. Access to Ameritech's AIN service management system functionality will be provided in a nondiscriminatory manner to Requesting Carrier to enable it to manage AIN services located wholly within Ameritech's network (SCP & SSP) or to manage AIN services where the service logic is located within Ameritech's SCP and the Customer is served from Requesting Carrier's AIN-compatible SSP. Upon request of Requesting Carrier, Ameritech shall provide Requesting Carrier the unbundled AIN Applications Access service product description and a list of existing Ameritech AIN applications.
- 3.2.2. The Service Management System (SMS) is the administration system for the service logic and data in the Advanced Intelligent Network (AIN) Service Control Point (SCP). The SMS contains the master copy of service level, subscriber level and subscription level data. The SMS also contains a copy of the service logic.

Logical access to the SMS will be managed by a set of programs designed by Ameritech. These programs provide security for the data that resides on the AIN platforms by allowing user access to only specific data that is appropriate to the customer or carrier. Whether explicitly stated in this document or not, all access to the SMS is managed through these programs. The only exceptions to managed access to SMS functionality are for the Ameritech Network Services organizations that administer the AIN platforms. They require direct access in order to appropriately administer the platforms.

Mediated access to SMS functionality will be provided through interface programs that will be developed for specific services. Requesting Carrier will have access to all of the data that the service requires in order to administer that service for its Customers. This includes service level, subscriber level, and subscription level data as well as any reports and measurement data that is mutually agreed upon by Ameritech and Requesting Carrier.

3.2.3. Service Logic. The SMS receives a copy of the service logic and service management logic from the Service Creation Environment (SCE) system. After population of specific network level and service level data, the SMS downloads a view of the service logic to the designated SCPs. The service management logic remains in the SMS to complement SMS utilities in the monitoring and administration of a specific service.

It is required that all of the Service Creation unit testing, System Integration Lab (SIL) testing and Network Deployment Testing has been completed.

It may be necessary for Requesting Carrier to negotiate timing and supply service specific data before that service can be deployed in the appropriate SCPs. Ameritech, however, is totally responsible for service logic deployment and initial SCP memory load in its network. Requesting Carrier will receive timing and supply of service specific data in a nondiscriminatory manner.

3.2.4. Service Administration. Service administration involves the management of service level data which the service logic requires for its execution. SMS supports the management of service specific common data. Any changes to the data representation of the Ameritech network, which impact one or more carrier services will be administered by Ameritech. Other Requesting Carrier specific or service specific data changes will be identified and administered by Requesting Carrier.

SCHEDULE 9.2.6

OPERATIONS SUPPORT SYSTEMS FUNCTIONS

- 1.0 Pre-Ordering, Ordering and Provisioning. Ameritech will use the interface described in <u>Section 10.13.2(a)</u> (including the separate interface used for ordering prior to the first quarter of 1997) for the transfer and receipt of data necessary to perform the pre-ordering, ordering, and provisioning functions (e.g., order entry, telephone number and due date selection). However, the Access Services Request (ASR) interface will be used for the transfer of information concerning the Network Elements and Combinations which Requesting Carrier intends to order in a specific Wire Center ("Footprint" or "Trunk Side Information").
- 2.0 Maintenance and Repair. Ameritech will use the interface described in <u>Section 10.13.3(a)</u> for the transfer and receipt of data necessary to perform the maintenance and repair functions (<u>e.g.</u>, trouble receipt and trouble status).
- 3.0 Billing. Ameritech will provide appropriate usage data to Requesting Carrier to facilitate Customer billing with attendant acknowledgments and status reports and exchange information to process claims and adjustments.

SCHEDULE 9.2.7

OPERATOR SERVICES AND DIRECTORY SERVICES

- 1.0 Operator Services. Operator Services consist of the following services.
- 1.1 <u>Manual Call Assistance</u> manual call processing with operator involvement for the following:
 - (a) Calling card the Customer dials 0+ or 0- and provides operator with calling card number for billing purposes.
 - (b) Collect the Customer dials 0+ or 0- and asks the operator to bill the call to the called number, <u>provided</u> such billing is accepted by the called number.
 - (c) Third number billed the Customer dials 0+ or 0- and asks the operator to bill the call to a different number than the calling or called number.
 - (d) Operator assistance providing local and intraLATA operator assistance for the purposes of:
 - (1) assisting Customers requesting help in completing calls or requesting information on how to place calls;
 - (2) handling emergency calls;
 - (3) handling credits and coin telephone local refund requests; and
 - (4) handling person-to-person calls.
 - (e) Operator Transfer Service ("OTS") calls in which the Customer dials "0", is connected to an Ameritech operator and then requests call routing to an IXC subscribing to OTS. The operator will key the IXC's digit carrier identification code to route the Customer to the requested IXC's point of termination.
 - (f) BLV Service in which operator verifies a busy condition on a line.
 - (g) BLVI service in which operator, after verifying a busy line, interrupts the call in progress.

- 1.2 <u>Automated Call Assistance</u> mechanized call processing without operator involvement for the following:
 - (a) Automated calling card service ("ACCS") the Customer dials 0 and a telephone number, and responds to prompts to complete the billing information.
 - (b) Automated Alternate Billing Service ("AABS") -
 - (1) the Customer dials 0 and a telephone number and responds to prompts to process the call and complete the billing information (Customer branding not currently available).
 - (2) ACCS calculates charges, relates the charge to the Customer, and monitors coins deposited before connecting the 1 + intraLATA or interLATA call.
- 1.3 <u>Line Information Database ("LIDB") Validation</u> mechanized queries to a LIDB for billing validation.
- 1.4 <u>Database Access</u> To the extent technically feasible, Ameritech will provide access to databases used in the provisioning of Operator Services via Requesting Carrier's Bona Fide Request.
- 2.0 Directory Assistance. Directory Assistance ("DA") service shall consist of the following services.
- 2.1 <u>Directory Assistance</u> those calls in which the Customer dial digits designated by Requesting Carrier to obtain Directory Assistance for local numbers located within his/her NPA. Two listings will be provided per call.
- 2.2 <u>Branding</u> the ability to put messages on the front end of a DA call that is directly trunked into Ameritech's DA switch.
- 2.3 <u>Information Call Completion</u> provides a Customer who has accessed the DA service and has received a number from the Audio Response Unit ("ARU") the option of having an intraLATA call completed by pressing a specific digit on a touch tone telephone. Information Call Completion is only available to Requesting Carrier if it direct trunks its DA calls to Ameritech.
- 2.4 Upon request, and through a technically feasible arrangement, Ameritech will provide access to databases used in the provisioning of DA via Requesting Carrier's Bona Fide Request at rates that recover Ameritech's costs of developing, providing and maintaining the service. Such unbundled access to the DA database shall be for the purpose of having Requesting Carrier's Telephone Exchange Service DA listing in the area placed into Ameritech's DA database, or to enable Requesting Carrier to read DA listing in the database so that Requesting Carrier can provide its own DA service.

- **3.0** Rate Application. Ameritech shall bill Requesting Carrier the applicable rates on a monthly basis, in accordance with the following methodology:
- 3.1 <u>Manual Call Assistance</u> operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls, whether or not they are completed.
- 3.2 <u>Automated Call Assistance (ACCS and AABS)</u> call occurrences multiplied by the per call occurrence rate. Total call occurrences shall include all processed calls, whether or not they are completed.
- 3.3 <u>LIDB Validation</u> validation occurrences multiplied by the LIDB validation per occurrence rate. Total validation occurrences shall include all validations, whether or not the call is completed. Ameritech will accumulate operator occurrences, automated occurrences, and LIDB validation occurrences via its Operator Services Call Analysis System ("OSCAS"). OSCAS utilizes TOPS AMA recordings to produce monthly summaries of mechanized and manual call occurrences.
- 3.4 <u>BLV</u> operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.
- 3.5 <u>BLVI</u> operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.
- 3.6 <u>Lost Records.</u> If Ameritech is responsible for lost, destroyed, or mutilated TOPS AMA recordings, Ameritech will not bill Requesting Carrier for those calls for which there are no records. Likewise, Ameritech shall not be held responsible by Requesting Carrier for lost revenue. However, if within ninety (90) days, actual data should become available, Ameritech will bill Requesting Carrier for those calls using actual data.